

CLAIMS

1. A character/graphic display apparatus, comprising:
  - a display device for displaying a character or
  - 5 graphic; and
  - a control section for controlling the display device;wherein:
  - the control section executes character/graphic
  - 10 display processing; and
  - the character/graphic display processing includes the steps of:
    - (a) scaling a character or graphic including
    - reference points along a specific axis so as to generate
    - 15 scaled reference points;
    - (b) quantizing a sum of distances between the scaled reference points by a first method so as to generate a sum quantized by the first method;
    - (c) quantizing the distances between the scaled
    - 20 reference points by a second method so as to generate distances quantized by the second method;
    - (d) adjusting at least one of the distances quantized by the second method such that a sum of the distances quantized by the second method equals the sum

quantized by the first method; and

(e) displaying the scaled character or graphic based on the scaled reference points accompanying the at least one adjusted distance.

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2. A character/graphic display apparatus according to claim 1, wherein the quantization by the second method is performed in consideration of a distance flag representing a minimum necessary distance as a distance  
10 quantized by the second method.

3. A character/graphic display apparatus according to claim 1, wherein step (d) is performed in consideration of a distance flag representing a minimum necessary  
15 distance as a distance quantized by the second method.

4. A character/graphic display apparatus according to claim 1, wherein step (d) includes the step of extending at least one of the distances quantized by the second method.  
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5. A character/graphic display apparatus according to claim 1, wherein step (d) includes the step of shortening at least one of the distances quantized by the second method.

6. A character/graphic display apparatus according to claim 1, wherein step (d) includes the step of making at least one of the distances quantized by the second method zero.

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7. A character/graphic display apparatus according to claim 1, wherein step (e) includes the step of displaying a first point which is a prescribed point on the scaled character, such that a value of distance a/distance b is  
10 closest to a value of distance A/distance B, where:

a second point which corresponds to the first point and is on the pre-scaling character is between a first reference point and a second reference point adjacent to each other, among the pre-scaling reference points;

15 distance A is a distance between the second point and the first reference point;

distance B is a distance between the second point and the second reference point;

20 distance a is between the first point and the scaled first reference point; and

distance b is between the first point and the scaled second reference point.

8. A character/graphic display apparatus according to

claim 1, wherein:

the character is formed of a plurality of blocks;

and

the character/graphic display processing further  
5 includes the step of executing steps (b) through (d) for  
each of the plurality of blocks.

9. A character/graphic display apparatus according to  
claim 6, wherein the step of making at least one of the  
10 distances quantized by the second method zero is performed  
in consideration of a flag which represents a position  
of a distance to be made zero in the order by which the  
at least one of the distances is made zero.

15 10. A character/graphic display method, comprising the  
steps of:

scaling a character or graphic including reference  
points along a specific axis so as to generate scaled  
reference points;

20 quantizing a sum of distances between the scaled  
reference points by a first method so as to generate a  
sum quantized by the first method;

quantizing the distances between the scaled  
reference points by a second method so as to generate

distances quantized by the second method;

adjusting at least one of the distances quantized  
by the second method such that a sum of the distances  
quantized by the second method equals the sum quantized  
5 by the first method; and

displaying the scaled character or graphic based  
on the scaled reference points accompanying the at least  
one adjusted distance.

10 11. A program for having a character/graphic display  
apparatus, including a display device for displaying a  
character or graphic and a controlling section for  
controlling the display device, to execute  
character/graphic display processing, the  
15 character/graphic display processing includes the steps  
of:

scaling a character or graphic including reference  
points along a specific axis so as to generate scaled  
reference points;

20 quantizing a sum of distances between the scaled  
reference points by a first method so as to generate a  
sum quantized by the first method;

quantizing the distances between the scaled  
reference points by a second method so as to generate

distances quantized by the second method;

adjusting at least one of the distances quantized  
by the second method such that a sum of the distances  
quantized by the second method equals the sum quantized  
5 by the first method; and

displaying the scaled character or graphic based  
on the scaled reference points accompanying the at least  
one adjusted distance.

10 12. A recording medium readable by a character/graphic  
display apparatus, including a display device for  
displaying a character or graphic and a controlling section  
for controlling the display device, the recording medium  
has a program for having the control section to execute  
15 character/graphic display processing which includes the  
steps of:

scaling a character or graphic including reference  
points along a specific axis so as to generate scaled  
reference points;

20 quantizing a sum of distances between the scaled  
reference points by a first method so as to generate a  
sum quantized by the first method;

quantizing the distances between the scaled  
reference points by a second method so as to generate

distances quantized by the second method;

adjusting at least one of the distances quantized  
by the second method such that a sum of the distances  
quantized by the second method equals the sum quantized  
5 by the first method; and

displaying the scaled character or graphic based  
on the scaled reference points accompanying the at least  
one adjusted distance.